

Allison H. Goddard (211098)
ali@pattersonlawgroup.com
PATTERSON LAW GROUP
402 West Broadway, 29th Floor
San Diego, CA 92101
Telephone: (619) 398-4760
Facsimile: (619) 756-6991

*Attorney for Defendant,
WI-LAN, INC.*

Additional Counsel Listed in Signature Block

**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF CALIFORNIA**

APPLE INC.,

Plaintiff,

v.

WI-LAN, INC.,

Defendant.

Case No. 3:14-cv-2235-DMS-BLM
(Consolidated Lead Case)

**DEFENDANT WI-LAN INC.'S
SECOND AMENDED ANSWER AND
COUNTERCLAIMS**

DEMAND FOR JURY TRIAL

WI-LAN, INC.,

Plaintiff,

v.

APPLE INC.,

Defendant.

1 Defendant Wi-LAN, Inc. (“Wi-LAN” or “Defendant”) files this Second Amended
 2 Answer to Plaintiff Apple Inc.’s (“Apple”) Third Amended Complaint (the “complaint”)
 3 for Declaratory Judgment, dated August 4, 2017. Wi-LAN denies that Apple is entitled to
 4 any relief. The statements herein are made upon information and belief. Wi-LAN’s
 5 specific responses to the numbered allegations are set forth below. Except as specifically
 6 admitted herein, Wi-LAN denies any remaining allegation in Apple’s complaint.

7 **NATURE OF THE ACTION**

8 1. Answering the allegations in Paragraph 1, Wi-LAN admits that this is an
 9 action for declaratory judgment of non-infringement, invalidity, and unenforceability of
 10 six (6) United States patents pursuant to the Declaratory Judgment Act.

11 **PARTIES**

12 2. The allegations in Paragraph 2 are not directed to Wi-LAN, and therefore no
 13 answer is required.

14 3. Admitted.

15 4. Wi-LAN admits that it has engaged in acts in and directed to California, but
 16 otherwise denies the allegations of this paragraph.

17 **JURISDICTION AND VENUE**

18 5. Admitted.

19 6. Answering the allegations in Paragraph 6, Wi-LAN admits that it is the
 20 owner of the patents-in-suit. Wi-LAN also admits that it has accused Apple of infringing
 21 the patents-in-suit and that it has requested a meeting with Apple regarding a potential
 22 license to the patents-in-suit. Wi-LAN also admits that it has previously initiated lawsuits
 23 against Apple. Wi-LAN also admits that a substantial controversy exists between the
 24 parties which is of sufficiency immediacy and reality to warrant an action on the patents-
 25 in-suit. Wi-LAN denies the remainder of the allegations in this paragraph.

26 7. Wi-LAN admits that this Court has personal jurisdiction over Wi-LAN. Wi-
 27 LAN admits that it has engaged in acts in and directed to California pertaining to the
 28 patents-in-suit. Wi-LAN admits that it is the owner of the patents-in-suit and that at least

1 some of the inventors and/or former assignees are located in California. Wi-LAN further
2 admits that it has met with companies in Santa Clara County, including Apple. The
3 remainder of the allegations in this Paragraph are denied.

4 **BACKGROUND OF PARTIES**

5 8. The allegations in Paragraph 8 are not directed to Wi-LAN, and therefore no
6 answer is required.

7 9. The allegations in Paragraph 9 are not directed to Wi-LAN, and therefore no
8 answer is required.

9 10. Denied.

10 11. Admitted.

11 12. Admitted.

12 13. Answering the allegations in Paragraph 13, Wi-LAN admits that there is an
13 actual case or controversy regarding whether Apple infringes the patents-in-suit. The
14 remainder of the allegations in this Paragraph are denied.

15 14. Admitted.

16 **THE PATENTS-IN-SUIT**

17 15. Admitted.

18 16. Admitted.

19 17. Admitted.

20 18. Admitted.

21 19. Admitted.

22 20. Admitted.

23 ///

24 ///

25 ///

26 ///

27 ///

28 ///

COUNT I

DECLARATION OF NONINFRINGEMENT OF U.S. PATENT NO. 8,457,145

21. Answering the allegations in Paragraph 21, Wi-LAN incorporates by reference Paragraphs 1-20 as if fully set forth herein.

22. Denied.

23. Answering the allegations in Paragraph 23, Wi-LAN admits that there is an actual case or controversy regarding whether Apple infringes the patents-in-suit. Wi-LAN disagrees that a declaration of non-infringement, invalidity, or unenforceability on any of the patents is warranted.

24. Denied.

COUNT II

DECLARATION OF INVALIDITY OF U.S. PATENT NO. 8,457,145

25. Answering the allegations in Paragraph 25, Wi-LAN incorporates by reference Paragraphs 1-24 as if fully set forth herein.

26. Denied.

27. Answering the allegations in Paragraph 27, Wi-LAN admits that there is an actual case or controversy regarding whether Apple infringes the patents-in-suit. Wi-LAN disagrees that a declaration of non-infringement, invalidity, or unenforceability on any of the patents is warranted.

28. Denied.

COUNT III

DECLARATION OF INVALIDITY OF U.S. PATENT NO. 8,462,723

29. Answering the allegations in Paragraph 29, Wi-LAN incorporates by reference Paragraphs 1-28 as if fully set forth herein.

30. Denied.

31. Answering the allegations in Paragraph 31, Wi-LAN admits that there is an actual case or controversy regarding whether Apple infringes the patents-in-suit. Wi-

1 LAN disagrees that a declaration of non-infringement, invalidity, or unenforceability on
2 any of the patents is warranted.

3 32. Denied.

4 **COUNT IV**

5 **DECLARATION OF INVALIDITY OF U.S. PATENT NO. 8,462,723**

6 33. Answering the allegations in Paragraph 33, Wi-LAN incorporates by
7 reference Paragraphs 1-32 as if fully set forth herein.

8 34. Denied.

9 35. Answering the allegations in Paragraph 35, Wi-LAN admits that there is an
10 actual case or controversy regarding whether Apple infringes the patents-in-suit. Wi-
11 LAN disagrees that a declaration of non-infringement, invalidity, or unenforceability on
12 any of the patents is warranted.

13 36. Denied.

14 **COUNT V**

15 **DECLARATION OF INVALIDITY OF U.S. PATENT NO. 8,462,761**

16 37. Answering the allegations in Paragraph 37, Wi-LAN incorporates by
17 reference Paragraphs 1-36 as if fully set forth herein.

18 38. Denied.

19 39. Answering the allegations in Paragraph 39, Wi-LAN admits that there is an
20 actual case or controversy regarding whether Apple infringes the patents-in-suit. Wi-
21 LAN disagrees that a declaration of non-infringement, invalidity, or unenforceability on
22 any of the patents is warranted.

23 40. Denied.

24 **COUNT VI**

25 **DECLARATION OF INVALIDITY OF U.S. PATENT NO. 8,462,761**

26 41. Answering the allegations in Paragraph 41, Wi-LAN incorporates by
27 reference Paragraphs 1-40 as if fully set forth herein.

28 42. Denied.

COUNT IX

DECLARATION OF NONINFRINGEMENT OF U.S. PATENT NO.

8,537,757

53. Answering the allegations in Paragraph 53, Wi-LAN incorporates by reference Paragraphs 1-52 as if fully set forth herein.

54. Denied.

55. Answering the allegations in Paragraph 55, Wi-LAN admits that there is an actual case or controversy regarding whether Apple infringes the patents-in-suit. Wi-LAN disagrees that a declaration of non-infringement, invalidity, or unenforceability on any of the patents is warranted.

56. Denied.

COUNT X

DECLARATION OF INVALIDITY OF U.S. PATENT NO. 8,537,757

57. Answering the allegations in Paragraph 57, Wi-LAN incorporates by reference Paragraphs 1-56 as if fully set forth herein.

58. Denied.

59. Answering the allegations in Paragraph 59, Wi-LAN admits that there is an actual case or controversy regarding whether Apple infringes the patents-in-suit. Wi-LAN disagrees that a declaration of non-infringement, invalidity, or unenforceability on any of the patents is warranted.

60. Denied.

COUNT XI

DECLARATION OF NONINFRINGEMENT OF U.S. PATENT NO.

8,311,040

61. Answering the allegations in Paragraph 61, Wi-LAN incorporates by reference Paragraphs 1-60 as if fully set forth herein.

62. Denied.

63. Answering the allegations in Paragraph 63, Wi-LAN admits that there is an actual case or controversy regarding whether Apple infringes the patents-in-suit. Wi-LAN disagrees that a declaration of non-infringement, invalidity, or unenforceability on any of the patents is warranted.

64. Denied.

COUNT XII

DECLARATION OF INVALIDITY OF U.S. PATENT NO. 8,311,040

65. Answering the allegations in Paragraph 65, Wi-LAN incorporates by reference Paragraphs 1-64 as if fully set forth herein.

66. Denied.

67. Answering the allegations in Paragraph 67, Wi-LAN admits that there is an actual case or controversy regarding whether Apple infringes the patents-in-suit. Wi-LAN disagrees that a declaration of non-infringement, invalidity, or unenforceability on any of the patents is warranted.

68. Denied.

COUNT XIII

DECLARATION OF UNENFORCEABILITY DUE TO UNCLEAN HANDS

69. Answering the allegations in Paragraph 69, Wi-LAN incorporates by reference Paragraphs 1-68 as if fully set forth herein.

70. Wi-LAN admits that Apple manufactures and sells products in this action. The remainder of the allegations in this Paragraph are denied.¹

71. Denied.

72. Wi-LAN admits that it sued Apple alleging infringement of U.S. Patent No. RE37,802 and Apple was found at the district court not to infringe certain claims. Wi-LAN also admits that it sued Apple alleging infringement of U.S. Patent No. 6,381,211

¹ In addition to denying Apple's allegations of "unclean hands," Apple's allegation is moot as more than two and a half years ago this Court dismissed Apple's claim for a declaration of unenforceability due to unclean hands as not a legally cognizable theory. See Dkt. 96 at 2-5 (December 12, 2014).

1 and certain claims were found invalid at the district court. The remainder of the
2 allegations in this Paragraph are denied.

3 73. Denied.

4 74. Wi-LAN admits that Telus Corporation brought an ownership dispute against
5 Wi-LAN on patents that are not in this suit. The remainder of the allegations in this
6 Paragraph are denied.

7 75. Denied.

8 76. Denied.

9 77. Denied.

10 **PRAYER FOR RELIEF**

11 These paragraphs set forth the statement of relief requested by Plaintiff to which no
12 response is required. Wi-LAN denies that Plaintiff is entitled to any of the requested
13 relief.

14 **JURY DEMAND**

15 Defendant hereby demands a trial by jury on all issues and claims so triable.

16 **COUNTERCLAIMS**

17 Without waiver of any rights, Wi-LAN, by and through its counsel, and by
18 way of Counterclaims against Apple, alleges:

19 **THE PARTIES**

20 1. Wi-LAN, Inc. is a corporation organized and existing under the laws of
21 Canada with its principal place of business at 303 Terry Fox Drive, Ottawa, ON Canada.
22 Wi-LAN, Inc. is referred to herein as “Wi-LAN.”

23 2. Wi-LAN’s wholly-owned subsidiary, Cygnus Broadband, Inc. (“Cygnus
24 Broadband”), now WiLAN Labs, had its principal place of business at 15090 Ave
25 of Science, San Diego, California. WiLAN Labs has its principal place of business at
26 5962 La Place Ct, Suite 265, Carlsbad, CA 92008.

27 3. Cygnus Broadband was a company dedicated to developing advanced 4G
28 technologies and products for Wi-LAN and others in the wireless industry that enhance

1 the capacity, quality of user experience, and connectivity of 4G (and next generation 5G)
2 mobile devices and networks.

3 4. The 4G patents asserted in this action, which are assigned to Wi-LAN (to
4 hold for the benefit of all Wi-LAN companies and licensees), were developed by Wi-
5 LAN's own Ken Stanwood, the CEO of Cygnus Broadband, and his team.

6 5. Mr. Stanwood has played a leadership role in the development of 4G
7 technologies and standards for more than a decade, starting with the industry's first major
8 4G cellular initiative, referred to as WiMAX. He served as Vice Chair of the IEEE
9 802.16 standards committee for WiMAX from 2003-2006 and as principal author of the
10 original IEEE 802.16 standard for 4G cellular networks and mobile devices.

11 6. Mr. Stanwood has written extensively on 4G technologies, including
12 coauthoring a popular textbook on the subject, and has been awarded 132 U.S. patents,
13 with many more patent applications currently pending before the United States Patent
14 Office and worldwide, many of which relate to 4G technologies.

15 7. Like Ken Stanwood, Wi-LAN's founders, Michel Fattouche and Hatim
16 Zaghoul, are widely recognized and acknowledged as wireless industry pioneers. Their
17 technologies, patents and writings have been cited in patents and publications written by
18 thousands of engineers and scientists in the wireless industry.

19 8. Wi-LAN's founders sought to achieve—and did achieve—for wireless data
20 what Qualcomm's founders did for cellular "voice" communication. Qualcomm's
21 founders developed key CDMA technologies that became the foundational air interface
22 for 2G and 3G cellular networks and mobile devices.

23 9. Just as importantly, Wi-LAN's founders developed key cellular "data"
24 technologies, including the W-OFDM air interface, to enable data to be exchanged at
25 desktop speeds over a wireless channel, such as in Wi-Fi networks, or from mobile
26
27
28

1 devices in 4G cellular networks. Wi-LAN's technologies have made Wi-Fi and 4G in
2 mobile devices possible.²

3 10. The Wi-LAN success story is featured in major publications worldwide,
4 including in such publications as *Scientific American*³ and *Time Magazine*,⁴ and in many
5 others. Wi-LAN and its founders have also been the subject of numerous industry awards
6 for their wireless innovations, and for their contribution to the growth in wireless data
7 capability present in today's smartphones, tablets, and other mobile devices.

8 11. One of Wi-LAN's co-founders is featured in one of Canada's leading
9 business publications as among the Top 100 Canadians of the 20th century for Wi-LAN's
10 wireless innovations.⁵ And Wi-LAN's original wireless designs and first wireless mobile
11 device have been displayed in the Canadian equivalent of the Smithsonian Institution.

12 12. Enabling high-speed wireless data capability in mobile devices was no small
13 task—it posed incredible challenges—something we take for granted today with desktop
14 speeds now standard in 4G mobile devices.

15 13. Over the years, Wi-LAN, Cygnus Broadband, and their predecessors have
16 invested hundreds of millions of dollars in developing, making and selling many of the
17 world's first fixed and mobile devices capable of transmitting and receiving wireless data
18 at desktop speeds.

19
20 ² See, e.g., *Ergen, Mustafa, Mobile Broadband: Including WiMAX and LTE*, John Wiley
21 & Sons, 2009 at p. 110, Section 4.1 “Principles of OFDM: Introduction” (recognizing one
22 of Wi-LAN's first patents, U.S. Patent No. 5,282,222, to W-OFDM as a major milestone
in the development of Wi-Fi and 4G technologies, turning a single lane wireless
communication channel into a multi-lane super highway, and enabling mobile devices to
transmit and receive data at desktop speeds).

23 ³ The Future of Wireless, *Scientific American*, October 2000 at p. 57 (“To date, wireless
24 multiplexing hasn't been exploited for cellular systems.... That may change soon.... Wi-
LAN holds a number of key patents for multiplexing technology known as wideband
orthogonal frequency division multiplexing, or W-OFDM”).

25 ⁴ Wi-LAN Shows How to be Successful-and Canadian-in the Global Economy, *Time*
26 *Magazine*, April 3, 2000.

27 ⁵ Great Canadians, *Maclean's*, July 1, 2000 (“Riding the wave of invention ... Wi-LAN is
28 one of those next generation companies. Its technology may well become the base for
what some call the coming wireless revolution: the ability to e-mail, surf the Net, adjust
the lights in your home and order theater tickets from a cellphone or hand-held
computer.”)

1 14. Wi-LAN's 4G products include, among others, the I.WILL, BWS 300,
2 LIBRA 3000, LIBRA 5800, LIBRA MX, and the LIBRA Mobilis.

3 15. Wi-LAN was the first company in the world to build Wi-Fi and 4G data
4 speeds into mobile devices, with speeds reaching up to 100 megabits per second (Mbps),
5 and it did so a decade before 4G would become the standard in the wireless industry that it
6 is today.

7 16. Wi-LAN is a company ahead of its time, and through the courage,
8 perseverance, and tireless efforts of its co-founders (immigrants of modest means when
9 they started Wi-LAN), the wireless industry that exists today was born, connecting people
10 across the globe like never before.

11 17. A number of Wi-LAN's advanced 4G technologies have their origin in work
12 started by Wi-LAN's Ken Stanwood and his team while at Ensemble Communications
13 ("Ensemble"), another San Diego company that Mr. Stanwood helped grow (then, as
14 Ensemble's Chief Technology Officer) to over 200 engineers, scientists, and support
15 personnel.

16 18. The advanced 4G technologies developed by Mr. Stanwood and his team
17 were employed in the network stacks utilizing the 4G WiMAX cellular standard, and were
18 subsequently adopted for use in the network stacks utilizing the 4G LTE cellular standard
19 used in today's 4G mobile devices.

20 19. These advanced 4G technologies, developed by Ken Stanwood and his team,
21 include:

22 (i) the bandwidth-on-demand and periodic bandwidth services built into
23 4G mobile devices to enable apps installed on such devices to have exactly the bandwidth
24 they need, when they need it, in real-time;

25 (ii) the multi-tasking and app management technologies in 4G mobile
26 devices that enable such devices to run multiple apps simultaneously, including
27 foreground and background apps, without degrading the user experience; and
28

1 (iii) the adaptive modulation capabilities in 4G mobile devices that allow
2 such devices to operate in all kinds of variable wireless conditions due to interference,
3 noise, and user mobility.

4 20. The efforts of Mr. Stanwood and his team in developing these advanced 4G
5 technologies have enabled 4G mobile devices to support a variety of services popular
6 among users of Apple 4G LTE mobiles devices, such as voice, conversational video, live
7 streaming of video and music, real-time gaming, video and photo sharing, email, and
8 instant messaging, all in the palm of your hand (“4G Network Services”).

9 21. Apple Inc. (“Apple”) is a corporation organized and existing under the laws
10 of the State of California, with its principal place of business at 1 Infinite Loop,
11 Cupertino, California.

12 22. Wi-LAN’s advanced 4G technologies that are the subject of the patents
13 asserted in this action enable Apple’s 4G LTE smartphones, tablets, and other 4G LTE
14 mobile devices to provide Apple users with the 4G Network Services that have made
15 Apple’s products so popular, and to operate with desktop speeds anywhere, anytime.

16 23. Wi-LAN’s wireless technologies and patents, including its advanced 4G
17 technologies, have been licensed by nearly all companies in the wireless industry,
18 comprising more than 130 companies. Apple is the only major company that has not
19 respected Wi-LAN’s intellectual property and its contribution to the growth and success
20 of the wireless industry.

21 24. Apple’s infringement gives Apple an unfair advantage over its competitors,
22 all of whom have chosen to do the right thing and license their use of Wi-LAN’s wireless
23 technologies and patents.

24 25. All of Apple’s major competitors in the mobile device industry, including
25 Samsung, HTC, LG, Nokia, RIM, and Motorola have licensed Wi-LAN’s wireless
26 technologies and patents. To encourage licensing of Wi-LAN’s technologies and patents
27 in mobile devices and growth of the wireless industry, Wi-LAN has set its licensing rates
28

1 at a fraction of the rates that Apple charges companies for use of Apple's technologies and
2 patents.

3 26. Wi-LAN has made numerous efforts to license the unauthorized use of its
4 wireless technologies and patents by Apple, but Apple has consistently refused to take a
5 license, choosing to use Wi-LAN's 4G technologies without paying anything for that
6 right.

7 27. Apple has willfully chosen to not respect the intellectual property of Wi-
8 LAN, including the six 4G patents asserted in this action directed to Wi-LAN's advanced
9 4G technologies, and it does so despite understanding the importance of intellectual
10 property and insisting that other companies respect Apple's own intellectual property.

11 28. Indeed, Apple has vigorously pursued litigations and patent enforcement
12 proceedings against anyone it believes is using Apple's patented technology without a
13 license. For example, from 2011 through 2014 Apple prosecuted massive and well
14 publicized litigations against Samsung for various Apple patents, and Apple was awarded
15 hundreds of millions of dollars in damages for five of its user interface patents on
16 inventions as simple as the "bounce-back" feature of its touch screen iPhones and the
17 curved shape of the corners of the icons used in its displays.

18 29. In its patent litigations against Samsung, Apple asked Samsung for as much
19 as \$40 per mobile device for use of its five interface patents—elements that may subtly
20 differentiate Apple's products from its competitors but that do not touch on the
21 fundamental wireless data communication technologies, including Wi-LAN's Wi-Fi and
22 4G technologies and patents, that underlie and make possible all of the core functions of
23 Apple's mobile devices that have made them so desirable to consumers.

24 30. Wi-LAN is not the only company that has had to deal with Apple's
25 disrespect for the intellectual property rights of others. Many well-known and well
26 respected companies in the wireless industry, including Samsung, Nokia, Motorola
27 Mobility, HTC, Eastman Kodak, and Pitney-Bowes have had to sue Apple for alleged
28

1 infringement of their patented technologies and use of their patented technologies without
2 paying for that right.

3 31. Notably, when Apple's co-founder Steve Jobs discussed Apple's success in a
4 PBS documentary entitled "Triumph of the Nerds," he said, "We have always been
5 shameless about stealing great ideas."

6 32. In early meetings between Wi-LAN and Apple, years before Apple would
7 introduce its 4G LTE mobile devices, Wi-LAN presented Apple with a detailed blueprint
8 of Wi-LAN's wireless technologies and how they would enable Apple's computers and
9 mobile devices to provide 4G Network Services, such as streaming movies and videos,
10 sharing pictures, surfing the internet, and chatting online with friends.⁶

11 33. Apple arrogantly dismissed Wi-LAN's wireless technologies and vision at
12 the time, believing that if it was not invented by Apple it was not possible.

13 34. Yet today, after Wi-LAN has proven the promise of its wireless technologies
14 to the world, Apple is riding the wave in growth of the wireless industry, in particular
15 with its 4G LTE smartphones, tablets, and other 4G LTE mobile devices that use Wi-
16 LAN's great ideas, including Wi-LAN's advanced 4G capabilities, and Apple is making
17 billions of dollars in profits doing so.

18 35. Before initiating litigation, Wi-LAN made substantial efforts for more than a
19 year to license Apple's use of Wi-LAN's advanced 4G technologies and patents in its 4G
20 LTE mobile devices, expecting that Apple would proceed in good faith, which it has not
21 done.

22 36. Most recently, in a written communication to Apple on June 16, 2014, Wi-
23 LAN requested a meeting with Apple to resolve this matter and Wi-LAN provided
24
25

26 ⁶ See The Future of Wireless Data Communications, Network Living, *Wi-LAN 1999*
27 *Annual Report* at 9-33 ("This is no longer a remote possibility-the technology needed to
28 make this reality is available... where we all live with the ease of wireless communication
in our everyday tasks; anytime, anywhere, to anyone. And its WOFDM technology that
will fuel this new way of life.")

1 significant details concerning the relevance of the 4G patents asserted herein to Apple's
2 4G LTE mobile devices.

3 37. Three days later, on June 19, 2014, rather than provide dates for a meeting,
4 Apple initiated litigation against Wi-LAN in the Northern District of California involving
5 five of the 4G patents asserted in this action in a clear attempt at gamesmanship to remove
6 this matter from this Court, which was at the time handling a related dispute between the
7 parties involving overlapping 4G patents and technologies and Apple 4G LTE products.

8 38. Apple's actions have forced Wi-LAN's hand, leaving it with no choice but to
9 protect its intellectual property through litigation.

10 **NATURE OF THE ACTION**

11 39. This is an action for patent infringement arising under the Patent Laws of the
12 United States, including 35 U.S.C. § 271.

13 40. Apple has committed acts of patent infringement within this district. Apple,
14 directly or through intermediaries, imports, manufactures, uses, sells, and/or offers to sell
15 infringing products within this district. Apple also purposely and voluntarily places
16 infringing products into the stream of commerce with the expectation that they will be
17 purchased by consumers in this district. Apple reasonably should have anticipated being
18 subject to suit in this district. Apple's acts of patent infringement are aimed at this district
19 and/or have effect in this district.

20 41. This is a civil action in which Wi-LAN seeks damages and other relief
21 against Apple for acts of patent infringement in violation of the Patent Laws of the United
22 States, 35 U.S.C. §§ 271 et seq.

23 **JURISDICTION AND VENUE**

24 42. This Court has subject matter jurisdiction of the federal question claims
25 raised in this Complaint pursuant to 28 U.S.C. §§ 1331 and 1338(a). 43.

26 43. Venue is proper in this Court pursuant to 28 U.S.C. §§ 1391 and 1400(b), in
27 that the acts and transactions complained of herein were conceived, carried out, made
28 effective, or had effect within the State of California and within this district, among other

places. Apple conducts business activities in this district, including regularly doing or soliciting business, engaging in conduct and/or deriving substantial revenue from goods and services provided to consumers in the State of California and in this district.

44. The Court has personal jurisdiction over Apple. Apple: (a) has operated, conducted, engaged in, and/or carried on a business or business venture in California and this district; (b) has at least an office or agent in California and this district; (c) has committed one or more tortious acts within California and this district; and (d) has been and is engaged in substantial and not isolated activity within California and this district.

45. Apple has been registered to do business in the State of California since 1977 and currently has a registered agent in the State of California.

APPLE'S PRODUCTS

46. Apple directly or indirectly through subsidiaries or affiliated companies markets, distributes, manufactures, imports, sells, and/or offers for sale wireless communication products, such as products compliant with the 3rd Generation Partnership Project ("3GPP") 4G LTE standard for Voice over LTE ("VoLTE"), including but not limited to the iPhone 7, iPhone 7 Plus, iPhone 6s, iPhone 6s Plus, iPhone SE, iPhone 6, iPhone 6 Plus ("VoLTE phones"), as well as other products which are reasonably similar in structure and/or operation, in the United States and in this district. Apple's products support at least Release 8, et seq. of the 4G LTE standard.

47. Upon information and belief, Apple's products also include software and associated hardware that prioritize the transmission of data generated by various applications that run on these Apple products, and in doing such prioritization utilize the claimed inventions of the patents asserted in this action.

FIRST COUNTERCLAIM: INFRINGEMENT OF

U.S. PATENT NO. 8,457,145

48. The allegations of all foregoing paragraphs are re-alleged as if fully set forth herein.

1 49. On June 4, 2013, the United States Patent and Trademark Office (“USPTO”)
2 duly and legally issued U.S. Patent No. 8,457,145 (the “’145 patent”), entitled “Method
3 and apparatus for bandwidth request/grant protocols in a wireless communication system”
4 after a full and fair examination.

5 50. The ’145 patent relates to, among other things, multitasking and management
6 of apps using periodic bandwidth requests.

7 51. Wi-LAN, Inc. is the sole owner of the ’145 patent. A true and correct copy
8 of the ’145 patent has been filed at D.I. 59-1.

9 52. Apple has been and is now infringing, literally and/or under the doctrine of
10 equivalents, the ’145 patent in this district and elsewhere by making, using, offering for
11 sale, importing, and/or selling, without authority from Wi-LAN, products that fall within
12 the scope of one or more of the claims of the ’145 patent.

13 53. Apple had actual notice of the ’145 patent and that its actions constitute
14 direct and indirect infringement of the ’145 patent. The most recent written
15 communication to Apple providing notice of its infringement is dated June 16, 2014.

16 54. Apple has been and is now indirectly infringing at least one claim of the ’145
17 patent in accordance with 35 U.S.C. § 271(b) in this district and elsewhere in the United
18 States. More specifically, Apple has been and is now actively inducing direct
19 infringement by other persons – i.e. Apple’s customers who use, sell or offer for sale
20 products that embody and/or otherwise practice one or more claims of the ’145 patent.
21 Apple had knowledge of the ’145 patent, and that its actions resulted in a direct
22 infringement of the ’145 patent, prior to the filing of this complaint, and knew or was
23 willfully blind that its actions would induce direct infringement by others and intended
24 that its actions would induce direct infringement by others.

25 55. Apple actively induces such infringement by, among other things, providing
26 user manuals and other instruction material for Apple’s devices that induce Apple’s
27 customers to use Apple’s devices in their normal and customary way to infringe the ’145
28

1 patent.⁷ Through its manufacture and sales of its devices, Apple specifically intended its
 2 customers to infringe the '145 patent. Further, Apple was aware that these normal and
 3 customary activities would infringe the '145 patent. Apple performed the acts that
 4 constitute induced infringement, and that would induce actual infringement, with
 5 knowledge of the '145 patent and with the knowledge or willful blindness that the induced
 6 acts would constitute direct infringement.

7 56. Accordingly, a reasonable inference is that Apple specifically intends for
 8 others, such as its customers, to directly infringe one or more claims of the '145 patent in
 9 the United States because Apple has knowledge of the '145 patent and Apple actively
 10 induces others (*i.e.* its customers) to directly infringe the '145 patent by using, selling, or
 11 offering to sell Apple's devices.

12 57. Apple has been and is now indirectly infringing at least one claim of the '145
 13 patent in accordance with 35 U.S.C. § 271(c) in this district and elsewhere in the United
 14 States. More specifically, Apple has been and is now providing non-staple articles of
 15 commerce to others for use in an infringing system or method with knowledge of the '145
 16 patent, and with knowledge that the use of its products resulted in a direct infringement of
 17 the '145 patent by its customers, and with knowledge that these non-staple articles of
 18 commerce are used as a material part of the claimed invention of the '145 patent.

19 58. Apple's devices compliant with 4G LTE include components comprising an
 20 application processor and a baseband processor specifically designed to support
 21 communication and transmission of data over 4G LTE-compliant networks. These
 22

23 ⁷ See, e.g., Apple's website for the iPhone, <https://www.apple.com/iphone/compare/>
 24 (instructing use on 4G LTE networks); iPhone User Guide For iOS 7.1 Software,
 25 http://manuals.info.apple.com/MANUALS/1000/MA1565/en_US/iphone_user_guide.pdf
 26 (instructing use on 4G LTE networks); iPhone User Guide For iOS 6.1 Software,
 27 http://manuals.info.apple.com/MANUALS/1000/MA1658/en_US/iphone_ios6_user_guide.pdf
 28 (instructing use on 4G LTE networks); Apple's website for the iPad,
<https://www.apple.com/ipad/compare/> (instructing use on 4G LTE networks); iPad User
 Guide For iOS 7.1 Software,
http://manuals.info.apple.com/MANUALS/1000/MA1595/en_US/ipad_user_guide.pdf
 (instructing use on 4G LTE networks); <http://support.apple.com/kb/ht4211> (instructing
 use of multitasking).

1 components are mounted to a circuit board in Apple's accused devices and, absent these
2 components, Apple's devices compliant with 4G LTE would not function in an acceptable
3 manner to send or receive data over 4G LTE networks. A reasonable inference to be
4 drawn from the facts set forth is that these components in Apple's devices are especially
5 made or especially adapted to operate in the accused Apple devices to provide wireless
6 communication, including the transmission of data in accordance with the 4G LTE
7 standard. Further, a reasonable inference to be drawn from the facts is that these
8 components comprising an application processor and a baseband processor are intended to
9 support communication of data over a 4G LTE network and are not staple articles or
10 commodities of commerce, and that the use of the components is required for operation of
11 the Apple devices to send or receive data over a 4G LTE-compliant network. Any other
12 use would be unusual, far-fetched, illusory, occasional, aberrant, or experimental.

13 59. The components comprising an application processor and a baseband
14 processor designed to support communication of data using 4G LTE in Apple's devices
15 are each a material part of the invention of the '145 patent and are especially made for the
16 infringing manufacture, sale, and use of Apple's accused devices. Apple's devices,
17 including those components, are especially made or adapted to infringe the '145 patent,
18 and have no substantial non-infringing uses.

19 60. The '145 patent is valid and enforceable.

20 61. By way of its infringing activities, Apple has caused and continues to cause
21 Wi-LAN to suffer damages, and Wi-LAN is entitled to recover from Apple damages in an
22 amount to be determined at trial.

23 **SECOND COUNTERCLAIM: INFRINGEMENT OF**

24 **U.S. PATENT NO. 8,462,723**

25 62. The allegations of all foregoing paragraphs are re-alleged as if fully set forth
26 herein.

1 63. On June 11, 2013, the USPTO duly and legally issued U.S. Patent No.
2 8,462,723 (the “’723 patent”), entitled “Methods and systems for transmission of multiple
3 modulated signals over wireless networks” after a full and fair examination.

4 64. The ’723 patent relates to, among other things, multitasking and management
5 of apps using non-contention bandwidth-on-demand requests.

6 65. Wi-LAN, Inc. is the sole owner of the ’723 patent. A true and correct copy
7 of the ’723 patent has been filed at D.I. 59-2.

8 66. Apple has been and is now infringing, literally and/or under the doctrine of
9 equivalents, the ’723 patent in this district and elsewhere by making, using, offering for
10 sale, importing, and/or selling, without authority from Wi-LAN, products that fall within
11 the scope of one or more of the claims of the ’723 patent.

12 67. Apple had actual notice of the ’723 patent and that its actions constitute
13 direct and indirect infringement of the ’723 patent. The most recent written
14 communication to Apple providing notice of its infringement is dated June 16, 2014.

15 68. Apple has been and is now indirectly infringing at least one claim of the ’723
16 patent in accordance with 35 U.S.C. § 271(b) in this district and elsewhere in the United
17 States. More specifically, Apple has been and is now actively inducing direct
18 infringement by other persons – i.e. Apple’s customers who make, use, sell or offer for
19 sale products that embody and/or otherwise practice one or more claims of the ’723
20 patent. Apple had knowledge of the ’723 patent, and that its actions resulted in a direct
21 infringement of the ’723 patent, prior to the filing of this complaint, and knew or was
22 willfully blind that its actions would induce direct infringement by others and intended
23 that its actions would induce direct infringement by others.

24 69. Apple actively induces such infringement by, among other things, providing
25 user manuals and other instruction material for Apple’s devices that induce Apple’s
26 customers to use Apple’s accused devices in their normal and customary way to infringe
27
28

the '723 patent.⁸ Through its manufacture and sales of its accused devices, Apple specifically intended its customers to infringe the '723 patent. Further, Apple was aware that these normal and customary activities would infringe the '723 patent. Apple performed the acts that constitute induced infringement, and would induce actual infringement, with the knowledge of the '723 patent and with the knowledge or willful blindness that the induced acts would constitute direct infringement.

70. Accordingly, a reasonable inference is that Apple specifically intends for others, such as its customers, to directly infringe one or more claims of the '723 patent in the United States because Apple has knowledge of the '723 patent and Apple actively induces others (i.e. its customers) to directly infringe the '723 patent by using, selling, or offering to sell Apple's devices.

71. Apple has been and is now indirectly infringing at least one claim of the '723 patent in accordance with 35 U.S.C. § 271(c) in this district and elsewhere in the United States. More specifically, Apple has been and is now providing non-staple articles of commerce to others for use in an infringing system or method with knowledge of the '723 patent, and with knowledge that the use of its accused products results in a direct infringement of the '723 patent by its customers, and with knowledge that these non-staple articles of commerce are used as a material part of the claimed invention of the '723 patent.

72. Apple's accused devices include components comprising an application processor and a baseband processor designed to support communication of data on 4G

⁸ See, e.g., Apple's website for the iPhone, <https://www.apple.com/iphone/compare/> (instructing use on 4G LTE networks); iPhone User Guide For iOS 7.1 Software, http://manuals.info.apple.com/MANUALS/1000/MA1565/en_US/iphone_user_guide.pdf (instructing use on 4G LTE networks); iPhone User Guide For iOS 6.1 Software, http://manuals.info.apple.com/MANUALS/1000/MA1658/en_US/iphone_ios6_user_guide.pdf (instructing use on 4G LTE networks); Apple's website for the iPad, <https://www.apple.com/ipad/compare/> (instructing use on 4G LTE networks); iPad User Guide For iOS 7.1 Software, http://manuals.info.apple.com/MANUALS/1000/MA1595/en_US/ipad_user_guide.pdf (instructing use on 4G LTE networks); <http://support.apple.com/kb/ht4211> (instructing use of multitasking).

1 LTE-compliant networks. These components are mounted to a circuit board in Apple's
 2 accused devices and, absent these components, Apple's accused devices would not
 3 function in an acceptable manner to send or receive data over 4G LTE-compliant
 4 networks. A reasonable inference to be drawn from the facts set forth is that these
 5 components in Apple's accused devices are especially made or especially adapted to
 6 provide wireless communication, including the transmission of data, in 4G LTE-
 7 compliant networks. Further, a reasonable inference to be drawn from the facts is that
 8 these components are not staple articles or commodities of commerce, and that the use of
 9 these components is required for operation of the Apple devices to send or receive data in
 10 a 4G LTE-compliant network. Any other use would be unusual, farfetched, illusory,
 11 occasional, aberrant, or experimental.

12 73. The components comprising the application processor and the baseband
 13 processor in Apple's accused devices are each a material part of the invention of the '723
 14 patent and are especially made for use in devices that infringe one or more claims of the
 15 '723 patent. Apple's accused devices have no substantial non-infringing uses.

16 74. The '723 patent is valid and enforceable.

17 75. By way of its infringing activities, Apple has caused and continues to cause
 18 Wi-LAN to suffer damages, and Wi-LAN is entitled to recover from Apple damages in an
 19 amount to be determined at trial.

20 **THIRD COUNTERCLAIM: INFRINGEMENT OF**

21 **U.S. PATENT NO. 8,537,757**

22 76. The allegations of all foregoing paragraphs are re-alleged as if fully set forth
 23 herein.

24 77. On June 11, 2013, the USPTO duly and legally issued U.S. Patent No.
 25 8,537,757 (the "'757 patent"), entitled "Method and system for adaptively obtaining
 26 bandwidth allocation requests" after a full and fair examination.

27 78. The '757 patent relates to, among other things, adaptive modulation for
 28 variable condition wireless channels due to interference, noise, and mobility.

1 79. Wi-LAN, Inc. is the sole owner of the '757 patent. A true and correct copy
2 of the '757 patent has been filed at D.I. 59-6.

3 80. Apple has been and is now infringing, literally and/or under the doctrine of
4 equivalents, the '757 patent in this district and elsewhere by making, using, offering for
5 sale, importing, and/or selling, without authority from Wi-LAN, products that fall within
6 the scope of one or more of the claims of the '757 patent.

7 81. Apple had actual notice of the '757 patent and that its actions constitute
8 direct and indirect infringement of the '757 patent. The most recent written
9 communication to Apple providing notice of its infringement is dated June 16, 2014.

10 82. Apple has been and is now indirectly infringing at least one claim of the '757
11 patent in accordance with 35 U.S.C. § 271(b) in this district and elsewhere in the United
12 States. More specifically, Apple has been and is now actively inducing direct
13 infringement by other persons – *i.e.* Apple's customers who use, sell or offer for sale
14 products that embody and/or otherwise practice one or more claims of the '757 patent.
15 Apple had knowledge of the '757 patent by others, and that its actions resulted in a direct
16 infringement of the '757 patent, prior to the filing of this complaint, and knew or was
17 willfully blind that its actions would induce direct infringement by others and intended
18 that its actions would induce direct infringement by others.

19 83. Apple actively induces such infringement by, among other things, providing
20 user manuals and other instruction material for Apple's devices that induce Apple's
21 customers to use Apple's devices in their normal and customary way to infringe the '757
22 patent.⁹ Through its manufacture and sales of its devices, Apple specifically intended its

23 ⁹ See, e.g., Apple's website for the iPhone, <https://www.apple.com/iphone/compare/>
24 (instructing use on 4G LTE networks); iPhone User Guide For iOS 7.1 Software,
25 http://manuals.info.apple.com/MANUALS/1000/MA1565/en_US/iphone_user_guide.pdf
26 (instructing use on 4G LTE networks); iPhone User Guide For iOS 6.1 Software,
27 http://manuals.info.apple.com/MANUALS/1000/MA1658/en_US/iphone_ios6_user_guid
28 [e.pdf](http://manuals.info.apple.com/MANUALS/1000/MA1658/en_US/iphone_ios6_user_guid_e.pdf) (instructing use on 4G LTE networks); Apple's website for the iPad,
<https://www.apple.com/ipad/compare/> (instructing use on 4G LTE networks); iPad User
Guide For iOS 7.1 Software,
http://manuals.info.apple.com/MANUALS/1000/MA1595/en_US/ipad_user_guide.pdf
(instructing use on 4G LTE networks); <http://support.apple.com/kb/ht4211> (instructing
use of multitasking).

1 customers to infringe the '757 patent. Further, Apple was aware that these normal and
2 customary activities when undertaken by its customer would result in a direct
3 infringement of the '757 patent. Apple performed the acts that constitute induced
4 infringement, and that would induce actual infringement, with the knowledge of the '757
5 patent and with the knowledge or willful blindness that the induced acts would constitute
6 direct infringement.

7 84. Accordingly, a reasonable inference is that Apple specifically intends for
8 others, such as its customers, to directly infringe one or more claims of the '757 patent in
9 the United States because Apple has knowledge of the '757 patent and Apple actively
10 induces others (i.e. its customers) to directly infringe the '757 patent by using, selling, or
11 offering to sell Apple's devices.

12 85. Apple has been and is now indirectly infringing at least one claim of the '757
13 patent in accordance with 35 U.S.C. § 271(c) in this district and elsewhere in the United
14 States. More specifically, Apple has been and is now providing non-staple articles of
15 commerce to others for use in an infringing system or method with knowledge of the '757
16 patent, and with knowledge that the use of its products results in a direct infringement of
17 the '757 patent by its customers, and with knowledge that these non-staple articles of
18 commerce are used as a material part of the claimed invention of the '757 patent.

19 86. Apple's devices include components comprising an application processor and
20 a baseband processor designed to support communication of data in an LTE compliant
21 network. These components are mounted to a circuit board in Apple's accused devices
22 and, absent these components, Apple's accused devices would not function in an
23 acceptable manner to send or receive data in a 4G LTE-compliant network. A reasonable
24 inference to be drawn from the facts set forth is that these components in Apple's accused
25 devices are especially made or especially adapted to operate in a manner that results in a
26 direct infringement of the '757 patent. Further, a reasonable inference to be drawn from
27 the facts is that the components are not a staple articles or commodities of commerce and
28 that the use of the components is required for the accused Apple devices to send or

1 receive data in a 4G LTE-compliant network. Any other use would be unusual, far-
 2 fetched, illusory, occasional, aberrant, or experimental.

3 87. The components comprising an application processor and a baseband
 4 processor in Apple's accused devices are each a material part of the invention of the '757
 5 patent and are especially made or adapted to infringe the '757 patent. Apple's accused
 6 devices products have no substantial uses that do not infringe the '757 patent.

7 88. The '757 patent is valid and enforceable.

8 89. By way of its infringing activities, Apple has caused and continues to cause
 9 Wi-LAN to suffer damages, and Wi-LAN is entitled to recover from Apple damages in an
 10 amount to be determined at trial.

11 **FOURTH COUNTERCLAIM: INFRINGEMENT OF**

12 **U.S. PATENT NO. 8,615,020**

13 90. The allegations of all foregoing paragraphs are re-alleged as if fully set forth
 14 herein.

15 91. On December 24, 2013, the USPTO duly and legally issued U.S. Patent No.
 16 8,615,020 (the "'020 patent"), entitled "Method and System for Adaptively Obtaining
 17 Bandwidth Allocation Requests" after a full and fair examination.

18 92. The '020 patent relates to, among other things, multitasking and management
 19 of apps using non-contention bandwidth-on-demand requests.

20 93. Wi-LAN, Inc. is the sole owner of the '020 patent. A true and correct copy of
 21 the '020 patent has been filed at D.I. 59-5.

22 94. Apple has been and is now infringing, literally and/or under the doctrine of
 23 equivalents, the '020 patent in this district and elsewhere by making, using, offering for
 24 sale, importing, and/or selling, without authority from Wi-LAN, products that fall within
 25 the scope of one or more of the claims of the '020 patent.

26 95. Apple had actual notice of the '020 patent and that its actions constitute
 27 direct and indirect infringement of the '020 patent. The most recent written
 28 communication to Apple providing notice of its infringement is dated June 16, 2014.

96. Apple has been and is now indirectly infringing at least one claim of the '020 patent in accordance with 35 U.S.C. § 271(b) in this district and elsewhere in the United States. More specifically, Apple has been and is now actively inducing direct infringement by other persons – *i.e.* Apple's customers who use, sell or offer for sale products that embody and/or otherwise practice one or more claims of the '020 patent. Apple had knowledge of the '020 patent by others, and that its actions resulted in a direct infringement of the '020 patent, prior to the filing of this complaint, and knew or was willfully blind that its actions would induce direct infringement by others and intended that its actions would induce direct infringement by others.

97. Apple actively induces such infringement by, among other things, providing user manuals and other instruction material for Apple's devices that induce Apple's customers to use Apple's devices in their normal and customary way to infringe the '020 patent.¹⁰ Through its manufacture and sales of its devices, Apple specifically intended its customers to infringe the '020 patent. Further, Apple was aware that these normal and customary activities when undertaken by its customer would result in a direct infringement of the '020 patent. Apple performed the acts that constitute induced infringement, and that would induce actual infringement, with the knowledge of the '020 patent and with the knowledge or willful blindness that the induced acts would constitute direct infringement.

98. Accordingly, a reasonable inference is that Apple specifically intends for others, such as its customers, to directly infringe one or more claims of the '020 patent in

¹⁰ See, e.g., Apple's website for the iPhone, <https://www.apple.com/iphone/compare/> (instructing use on 4G LTE networks); iPhone User Guide For iOS 7.1 Software, http://manuals.info.apple.com/MANUALS/1000/MA1565/en_US/iphone_user_guide.pdf (instructing use on 4G LTE networks); iPhone User Guide For iOS 6.1 Software, http://manuals.info.apple.com/MANUALS/1000/MA1658/en_US/iphone_ios6_user_guide.pdf (instructing use on 4G LTE networks); Apple's website for the iPad, <https://www.apple.com/ipad/compare/> (instructing use on 4G LTE networks); iPad User Guide For iOS 7.1 Software, http://manuals.info.apple.com/MANUALS/1000/MA1595/en_US/ipad_user_guide.pdf (instructing use on 4G LTE networks); <http://support.apple.com/kb/ht4211> (instructing use of multitasking).

1 the United States because Apple has knowledge of the '020 patent and Apple actively
2 induces others (i.e. its customers) to directly infringe the '020 patent by using, selling, or
3 offering to sell Apple's devices.

4 99. Apple has been and is now indirectly infringing at least one claim of the '020
5 patent in accordance with 35 U.S.C. § 271(c) in this district and elsewhere in the United
6 States. More specifically, Apple has been and is now providing non-staple articles of
7 commerce to others for use in an infringing system or method with knowledge of the '020
8 patent, and with knowledge that the use of its products results in a direct infringement of
9 the '020 patent by its customers, and with knowledge that these non-staple articles of
10 commerce are used as a material part of the claimed invention of the '020 patent.

11 100. Apple's devices include components comprising an application processor and
12 a baseband processor designed to support communication of data in a 4G LTE-compliant
13 network. These components are mounted to a circuit board in Apple's accused devices
14 and, absent these components, Apple's accused devices would not function in an
15 acceptable manner to send or receive data in a 4G LTE-compliant network. A reasonable
16 inference to be drawn from the facts set forth is that these components in Apple's accused
17 devices are especially made or especially adapted to operate in a manner that results in a
18 direct infringement of the '020 patent. Further, a reasonable inference to be drawn from
19 the facts is that the components are not a staple articles or commodities of commerce and
20 that the use of the components is required for the accused Apple devices to send or
21 receive data in a 4G LTE-compliant network. Any other use would be unusual, far-
22 fetched, illusory, occasional, aberrant, or experimental.

23 101. The components comprising an application processor and a baseband
24 processor in Apple's accused devices are each a material part of the invention of the '020
25 patent and are especially made or adapted to infringe the '020 patent. Apple's accused
26 devices products have no substantial uses that do not infringe the '020 patent.

27 102. The '020 patent is valid and enforceable.
28

1 103. By way of its infringing activities, Apple has caused and continues to cause
2 Wi-LAN to suffer damages, and Wi-LAN is entitled to recover from Apple damages in an
3 amount to be determined at trial.

4 **FIFTH COUNTERCLAIM: INFRINGEMENT OF**
5 **U.S. PATENT NO. 8,462,761**

6 104. The allegations of all foregoing paragraphs are re-alleged as if fully set forth
7 herein.

8 105. On June 11, 2013, the USPTO duly and legally issued U.S. Patent No.
9 8,462,761 (the “’761 patent”), entitled “Method and system for adaptively obtaining
10 bandwidth allocation requests” after a full and fair examination.

11 106. The ’761 patent relates to, among other things, multitasking and management
12 of apps using non-contention bandwidth-on-demand requests or periodic bandwidth
13 requests.

14 107. Wi-LAN, Inc. is the sole owner of the ’761 patent. A true and correct copy
15 of the ’761 patent has been filed at D.I. 59-4.

16 108. Apple has been and is now infringing, literally and/or under the doctrine of
17 equivalents, the ’761 patent in this district and elsewhere by making, using, offering for
18 sale, importing, and/or selling, without authority from Wi-LAN, products that fall within
19 the scope of one or more of the claims of the ’761 patent.

20 109. Apple had actual notice of the ’761 patent and that its actions constitute
21 direct and indirect infringement of the ’761 patent. The most recent written
22 communication to Apple providing notice of its infringement is dated June 16, 2014.

23 110. Apple has been and is now indirectly infringing at least one claim of the ’761
24 patent in accordance with 35 U.S.C. § 271(b) in this district and elsewhere in the United
25 States. More specifically, Apple has been and is now actively inducing direct
26 infringement by other persons – *i.e.* Apple’s customers who use, sell or offer for sale
27 products that embody and/or otherwise practice one or more claims of the ’761 patent.
28 Apple had knowledge of the ’761 patent by others, and that its actions resulted in a direct

1 infringement of the '761 patent, prior to the filing of this complaint, and knew or was
 2 willfully blind that its actions would induce direct infringement by others and intended
 3 that its actions would induce direct infringement by others.

4 111. Apple actively induces such infringement by, among other things, providing
 5 user manuals and other instruction material for Apple's devices that induce Apple's
 6 customers to use Apple's devices in their normal and customary way to infringe the '761
 7 patent.¹¹ Through its manufacture and sales of its devices, Apple specifically intended its
 8 customers to infringe the '761 patent. Further, Apple was aware that these normal and
 9 customary activities when undertaken by its customer would result in a direct
 10 infringement of the '761 patent. Apple performed the acts that constitute induced
 11 infringement, and that would induce actual infringement, with the knowledge of the '761
 12 patent and with the knowledge or willful blindness that the induced acts would constitute
 13 direct infringement.

14 112. Accordingly, a reasonable inference is that Apple specifically intends for
 15 others, such as its customers, to directly infringe one or more claims of the '761 patent in
 16 the United States because Apple has knowledge of the '761 patent and Apple actively
 17 induces others (i.e. its customers) to directly infringe the '761 patent by using, selling, or
 18 offering to sell Apple's devices.

19 113. Apple has been and is now indirectly infringing at least one claim of the '761
 20 patent in accordance with 35 U.S.C. § 271(c) in this district and elsewhere in the United
 21 States. More specifically, Apple has been and is now providing non-staple articles of
 22

23 ¹¹ See, e.g., Apple's website for the iPhone, <https://www.apple.com/iphone/compare/>
 24 (instructing use on 4G LTE networks); iPhone User Guide For iOS 7.1 Software,
 25 http://manuals.info.apple.com/MANUALS/1000/MA1565/en_US/iphone_user_guide.pdf
 26 (instructing use on 4G LTE networks); iPhone User Guide For iOS 6.1 Software,
 27 http://manuals.info.apple.com/MANUALS/1000/MA1658/en_US/iphone_ios6_user_guide.pdf
 28 (instructing use on 4G LTE networks); Apple's website for the iPad,
<https://www.apple.com/ipad/compare/> (instructing use on 4G LTE networks); iPad User
 Guide For iOS 7.1 Software,
http://manuals.info.apple.com/MANUALS/1000/MA1595/en_US/ipad_user_guide.pdf
 (instructing use on 4G LTE networks); <http://support.apple.com/kb/ht4211> (instructing
 use of multitasking).

1 commerce to others for use in an infringing system or method with knowledge of the '761
 2 patent, and with knowledge that the use of its products results in a direct infringement of
 3 the '761 patent by its customers, and with knowledge that these non-staple articles of
 4 commerce are used as a material part of the claimed invention of the '761 patent.

5 114. Apple's devices include components comprising an application processor and
 6 a baseband processor designed to support communication of data in a 4G LTE-compliant
 7 network. These components are mounted to a circuit board in Apple's accused devices
 8 and, absent these components, Apple's accused devices would not function in an
 9 acceptable manner to send or receive data in a 4G LTE-compliant network. A reasonable
 10 inference to be drawn from the facts set forth is that these components in Apple's accused
 11 devices are especially made or especially adapted to operate in a manner that results in a
 12 direct infringement of the '761 patent. Further, a reasonable inference to be drawn from
 13 the facts is that the components are not a staple articles or commodities of commerce and
 14 that the use of the components is required for the accused Apple devices to send or
 15 receive data in a 4G LTE-compliant network. Any other use would be unusual, far-
 16 fetched, illusory, occasional, aberrant, or experimental.

17 115. The components comprising an application processor and a baseband
 18 processor in Apple's accused devices are each a material part of the invention of the '761
 19 patent and are especially made or adapted to infringe the '761 patent. Apple's accused
 20 devices products have no substantial uses that do not infringe the '761 patent.

21 116. The '761 patent is valid and enforceable.

22 117. By way of its infringing activities, Apple has caused and continues to cause
 23 Wi-LAN to suffer damages, and Wi-LAN is entitled to recover from Apple damages in an
 24 amount to be determined at trial.

25 **SIXTH COUNTERCLAIM: INFRINGEMENT OF**
 26 **U.S. PATENT NO. 8,311,040**

27 118. The allegations of all foregoing paragraphs are re-alleged as if fully set forth
 28 herein.

1 119. On November 13, 2012, the USPTO duly and legally issued U.S. Patent No.
2 8,311,040 (the “’040 patent”), entitled “Packing source data packets into transporting
3 packets with fragmentation” after a full and fair examination.

4 120. The ’040 patent relates to, among other things, packet data communication
5 systems, and reformatting data in such systems before transmitting the data through a link.

6 121. Wi-LAN, Inc. is the sole owner of the ’040 patent. A true and correct copy of
7 the ’040 patent is attached as Exhibit A.

8 122. Apple has been and is now infringing, literally and/or under the doctrine of
9 equivalents, the ’040 patent in this district and elsewhere by making, using, offering for
10 sale, importing, and/or selling, without authority from Wi-LAN, products that fall within
11 the scope of one or more of the claims of the ’040 patent.

12 123. Apple has had actual notice of the ’040 patent and that its actions constitute
13 direct and indirect infringement of the ’040 patent. Apple has had knowledge of the ’040
14 patent since June 2012, when Wi-LAN approached Apple about entering into a licensing
15 agreement. Wi-LAN filed suit against Apple asserting the ’040 patent on December 6,
16 2012. *Wi-LAN USA, Inc. et al v. Apple Inc.*, No. 13-cv-798 DMS(BLM) (S.D. Cal. Dec. 6,
17 2012) (the “First Action”).

18 124. Apple has been and is now indirectly infringing at least one claim of the ’040
19 patent in accordance with 35 U.S.C. § 271(b) in this district and elsewhere in the United
20 States. More specifically, Apple has been and is now actively inducing direct
21 infringement by other persons – *i.e.* Apple’s customers who use, sell or offer for sale
22 products that embody and/or otherwise practice one or more claims of the ’040 patent.
23 Apple had knowledge of the ’040 patent by others, and that its actions resulted in a direct
24 infringement of the ’040 patent, prior to the filing of this complaint, and knew or was
25 willfully blind that its actions would induce direct infringement by others and intended
26 that its actions would induce direct infringement by others.

27 125. Apple actively induces such infringement by, among other things, providing
28 user manuals and other instruction material for Apple’s devices that induce Apple’s

1 customers to use Apple's devices in their normal and customary way to infringe the '040
 2 patent.¹² Through its manufacture and sales of its devices, Apple specifically intended its
 3 customers to infringe the '040 patent. Further, Apple was aware that these normal and
 4 customary activities when undertaken by its customer would result in a direct
 5 infringement of the '040 patent. Apple performed the acts that constitute induced
 6 infringement, and that would induce actual infringement, with the knowledge of the '040
 7 patent and with the knowledge or willful blindness that the induced acts would constitute
 8 direct infringement.

9 126. Accordingly, a reasonable inference is that Apple specifically intends for
 10 others, such as its customers, to directly infringe one or more claims of the '040 patent in
 11 the United States because Apple has knowledge of the '040 patent and Apple actively
 12 induces others (i.e. its customers) to directly infringe the '040 patent by using, selling, or
 13 offering to sell Apple's devices.

14 127. Apple has been and is now indirectly infringing at least one claim of the '040
 15 patent in accordance with 35 U.S.C. § 271(c) in this district and elsewhere in the United
 16 States. More specifically, Apple has been and is now providing non-staple articles of
 17 commerce to others for use in an infringing system or method with knowledge of the '040
 18 patent, and with knowledge that the use of its products results in a direct infringement of
 19 the '040 patent by its customers, and with knowledge that these non-staple articles of
 20 commerce are used as a material part of the claimed invention of the '040 patent.

21
 22
 23 ¹² See, e.g., Apple's website for the iPhone, <https://www.apple.com/iphone/compare/>
 24 (instructing use on 4G LTE networks); iPhone User Guide For iOS 7.1 Software,
 25 http://manuals.info.apple.com/MANUALS/1000/MA1565/en_US/iphone_user_guide.pdf
 26 (instructing use on 4G LTE networks); iPhone User Guide For iOS 6.1 Software,
 27 http://manuals.info.apple.com/MANUALS/1000/MA1658/en_US/iphone_ios6_user_guide.pdf
 28 (instructing use on 4G LTE networks); Apple's website for the iPad,
<https://www.apple.com/ipad/compare/> (instructing use on 4G LTE networks); iPad User
 Guide For iOS 7.1 Software,
http://manuals.info.apple.com/MANUALS/1000/MA1595/en_US/ipad_user_guide.pdf
 (instructing use on 4G LTE networks); <http://support.apple.com/kb/ht4211> (instructing
 use of multitasking).

128. Apple's devices include components comprising an application processor and a baseband processor designed to support communication of data in a 4G LTE-compliant network. These components are mounted to a circuit board in Apple's accused devices and, absent these components, Apple's accused devices would not function in an acceptable manner to send or receive data in a 4G LTE-compliant network. A reasonable inference to be drawn from the facts set forth is that these components in Apple's accused devices are especially made or especially adapted to operate in a manner that results in a direct infringement of the '040 patent. Further, a reasonable inference to be drawn from the facts is that the components are not a staple articles or commodities of commerce and that the use of the components is required for the accused Apple devices to send or receive data in a 4G LTE-compliant network. Any other use would be unusual, far-fetched, illusory, occasional, aberrant, or experimental.

129. The components comprising an application processor and a baseband processor in Apple's accused devices are each a material part of the invention of the '040 patent and are especially made or adapted to infringe the '040 patent. Apple's accused devices products have no substantial uses that do not infringe the '040 patent.

130. The '040 patent is valid and enforceable.

131. By way of its infringing activities, Apple has caused and continues to cause Wi-LAN to suffer damages, and Wi-LAN is entitled to recover from Apple damages in an amount to be determined at trial.

WILLFUL INFRINGEMENT

132. The allegations of all foregoing paragraphs are re-alleged as fully set forth herein.

133. Before initiating litigation, Wi-LAN made substantial efforts to license Apple's use of Wi-LAN's advanced 4G technologies and patents used in Apple's 4G LTE mobile devices, expecting that Apple would proceed in good faith.

134. On June 16, 2014, Wi-LAN expressly provided notice to Apple that it infringes the '145, '723, '757, '020, and '761 patents. Wi-LAN provided detailed

1 information concerning the pioneering nature of Ken Stanwood's inventions that are
2 claimed in these patents, and explained that these fundamental inventions, which are
3 implemented in products compliant with the 4G LTE standard, enable advanced features
4 of Apple's 4G LTE mobile products.

5 135. On June 17, 2014, Apple responded to Wi-LAN's notice communication,
6 admitting that it had not studied the '145, '723, '757, '020, and '761 patents.

7 136. Two days later, instead of following through on its commitment to meet in
8 order to negotiate a license, Apple filed suit against Wi-LAN. Given that the inventions
9 claimed in the '145, '723, '757, '020, and '761 patents are fundamental to implementation
10 of products compliant with the 4G LTE standard, an objectively defined risk exists that
11 Apple infringes the patents-in-suit. Furthermore, upon information and belief, prior to
12 initiating suit against Wi-LAN, Apple did not conduct a reasonable investigation to
13 ascertain whether it infringes the patents-in-suit.

14 137. Apple has had knowledge of the '040 patent since June 2012 by way of
15 information disclosed to Apple during licensing negotiations between Wi-LAN and
16 Apple, as alleged in Wi-LAN's First Amended Complaint in the First Action. First
17 Action, Dkt. 34 at 4. At the very latest, Apple has had actual knowledge of the '040 patent
18 since December 6, 2012, when Wi-LAN asserted the '040 patent against Apple in the
19 First Action.

20 138. Apple's infringement of the patents-in-suit thus occurs with knowledge of
21 and/or objective recklessness and has been and continues to be willful and deliberate.

22 139. Apple's willful and deliberate infringement entitles Wi-LAN to enhanced
23 damages under 35 U.S.C. § 285.

24 **IRREPARABLE HARM TO WI-LAN**

25 140. Wi-LAN has been irreparably harmed by Apple's acts of infringement, and
26 will continue to be harmed unless and until Apple's acts of infringement are enjoined by
27 this Court. Apple has no adequate remedy at law to redress Apple's continuing acts of
28 infringement. The hardships that would be imposed upon Apple by an injunction are less

1 than those faced by Wi-LAN should an injunction not issue. Furthermore, the public
 2 interest would be served by issuance of an injunction. As a result of Apple's acts of
 3 infringement, Wi-LAN has suffered and will continue to suffer damages in an amount to
 4 be proved at trial.

5 **PRAYER FOR RELIEF**

6 WHEREFORE, Wi-LAN prays for judgment against Apple as follows:

7 141. Declaring that Apple has been and is now infringing, literally and/or under
 8 the doctrine of equivalents, one or more claims of each of U.S. Patent No. 8,457,145, U.S.
 9 Patent No. 8,462,723, U.S. Patent No. 8,537,757, U.S. Patent No. 8,615,020, U.S. Patent
 10 No. 8,462,761, and U.S. Patent No. 8,311,040;

11 142. Declaring that Apple has been and is now contributorily infringing one or
 12 more claims of each of U.S. Patent No. 8,457,145, U.S. Patent No. 8,462,723, U.S. Patent
 13 No. 8,537,757, U.S. Patent No. 8,615,020, U.S. Patent No. 8,462,761, and U.S. Patent No.
 14 8,311,040;

15 143. Declaring that Apple has been and is now inducing infringement of U.S.
 16 Patent No. 8,457,145, U.S. Patent No. 8,462,723, U.S. Patent No. 8,537,757, U.S. Patent
 17 No. 8,615,020, U.S. Patent No. 8,462,761, and U.S. Patent No. 8,311,040;

18 144. Permanently enjoining Apple and its officers, directors, agents, servants,
 19 employees, affiliates, divisions, branches, subsidiaries, parents and all others acting in
 20 concert or privity with any of them from infringing, inducing the infringement of, or
 21 contributing to the infringement of one or more of each of U.S. Patent No. 8,457,145, U.S.
 22 Patent No. 8,462,723, U.S. Patent No. 8,537,757, U.S. Patent No. 8,615,020, U.S. Patent
 23 No. 8,462,761, and U.S. Patent No. 8,311,040;

24 145. Declaring that Apple's infringement is willful and that this is an exceptional
 25 case under 35 U.S.C. § 285 and awarding attorneys' fees and costs in this action;

26 146. Awarding to Wi-LAN damages arising out of Apple's infringement of one or
 27 more of each of U.S. Patent No. 8,457,145, U.S. Patent No. 8,462,723, U.S. Patent No.
 28 8,537,757, U.S. Patent No. 8,615,020, U.S. Patent No. 8,462,761, and U.S. Patent No.

8,311,040 together with prejudgment and post-judgment interest, in an amount to be determined at trial;

147. Awarding to Wi-LAN its costs in connection with this action; and

148. Such other and further relief in law or in equity to which Wi-LAN may be justly entitled.

DEMAND FOR JURY TRIAL

149. Wi-LAN demands a trial by jury on all issues so triable.

Dated: August 15, 2017

Respectfully submitted,

By: /s/ Allison Goddard

Allison H. Goddard (211098)
ali@pattersonlawgroup.com
PATTERSON LAW GROUP
402 West Broadway, 29th Floor
San Diego, CA 92101
(619) 398-4760
(619) 756-6991 (facsimile)

Robert Cote
rcote@mckoolsmith.com
Brett Cooper
bcooper@mckoolsmith.com
Jonathan Yim
jyim@mckoolsmith.com
Kevin Schubert
kschubert@mckoolsmith.com
McKOOL SMITH, P.C.
One Bryant Park, 47th Floor
New York, NY 10036
(212) 402-9400
(212) 402-9444 (facsimile)

Seth Hasenour
shasenour@mckoolsmith.com
MCKOOL SMITH, P.C.
300 W. 6th Street, Suite 1700
Austin, TX 78701
(512) 692-8700

(512) 692-8744 (facsimile)

*Attorneys for Defendant,
Wi-LAN Inc.*

CERTIFICATE OF SERVICE

I hereby certify that on August 15, 2017, a true and correct copy of **DEFENDANT WI-LAN INC.'S SECOND AMENDED ANSWER AND COUNTERCLAIMS** was filed through the Court's CM/ECF system, and was served through that system under Fed. R. Civ. P. 5(b)(2)(E) on all counsel who are deemed to have consented to electronic service.

Dated: August 15, 2017

By: /s/ Allison Goddard

Allison H. Goddard (211098)
ali@pattersonlawgroup.com
PATTERSON LAW GROUP
402 West Broadway, 29th Floor
San Diego, CA 92101
(619) 398-4760
(619) 756-6991 (facsimile)

*Attorneys for Defendant,
Wi-LAN Inc.*